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REMARKS

Claims 1-3, 5 and 6 are pending in the application. Claims 1, 2 and 5 are amended herein. Entry of the amendments and favorable reconsideration of the application is respectfully requested in view of the following comments.

Claims 1, 2 and 5 have been amended to clarify that the readout section reads subsequent moving documents as well as the reflected light of the second white board without rereading the first standard white board so as to continue to correct the quantity of irradiation light with respect to the subsequent moving documents. As is discussed below, such amendments are not believed to be necessary to distinguish over the cited art, and therefore do not raise any new issues of patentability. Rather, such amendments merely further clarify the invention already distinguishable over the cited art.

I.   REJECTION OF CLAIMS 1-3, 5 AND 6 UNDER 35 USC §102(b)

Claims 1-3, 5 and 6 stand rejected under 35 USC §102(b) based on *Webb et al.* Withdrawal of the rejection is respectfully requested for at least the following reasons.
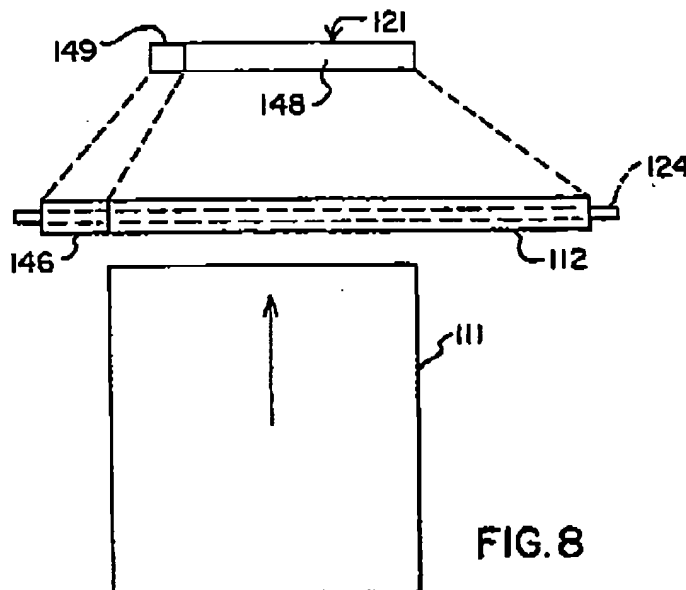

Fig. 8 of Webb et al. (Moving Document)

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The Examiner now rejects these claims under 35 U.S.C. §102(b) based on the newly cited *Webb et al.* Specifically, the Examiner refers to the *moving document type* embodiment of Fig. 8 in *Webb et al.* (reproduced above). In such *moving document type* embodiment, the document 111 moves over the platen 112 adjacent to the target 146. The light that is reflected from the target 146 is used to maintain the intensity of the light footprint substantially constant during the scanning of all rows of the moving document (see e.g., Column 15, Lines 21-31).
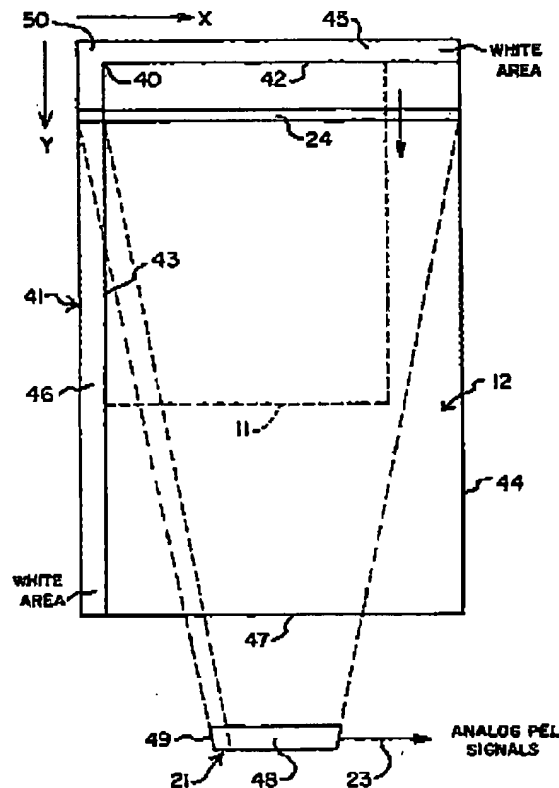

Fig. 4 of Webb et al. (Non-Moving Document)

On the other hand, in connection with a *non-moving document type* embodiment as shown in Fig. 4 (reproduced above), *Webb et al.* describes initially reading and

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storing the image output signal taken from the white area 50 at the beginning of a document scan. When a variation in the output in the target portion 46 is detected during a document scan, the microprocessor 53 operates to change the magnitude of energization of the light source 16 so as to maintain the output signal substantially equal to the reference signal originally established at the beginning of the document scan. (See e.g., Column 9, Lines 56-68; and Column 10, Lines 38-51).

Thus, in the *moving document type* embodiment of Fig. 8 *Webb et al.* does not describe a white area analogous to the target portion 45 included in the *non-moving document type* embodiment of Fig. 4. *Webb et al.* describes only the corresponding target portion 46(146) with respect to the embodiment of Fig. 8 (see e.g., Column 15, Lines 1-31).

Consequently, the *non-moving document type* embodiment of Fig. 4 in *Webb et al.* does *not* include a document moving mode with corresponding document passing area as recited in Claims 1, 2 and 5. As for the *moving document type* embodiment of Fig. 8, *Webb et al.* does not teach or suggest a first standard white board as recited in Claims 1, 2 and 5.

Webb et al. therefore fails to teach or suggest an image reader and method for a moving document having each and every feature of the invention as recited in claims 1, 2 and 5. Withdrawal of the rejection for such reason alone is respectfully requested.

Furthermore, applicants note that *Webb et al.* describes comparing the light output from region 50 with that of target portion 46 *with respect to* each *document scan.* (See e.g. Fig. 7). The present invention, on the other hand, addresses the desirability of not having to return the optical system to a predetermined home position for each document which is read as part of an automatic document feeder. (See e.g., Spec., Page 4, Lines 3-9). This feature is illustrated in Fig. 8 of the present application whereby in Step 21 it is determined whether there is a subsequent document. If so, the document is read together with the standard white board at both ends of the lamp without reading the white board at the home position (e.g., Step S12).

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Claims 1, 2 and 5 have been amended as noted above to emphasize further such distinction. *Webb et al.* does not teach or suggest a configuration in which a readout section reads subsequent moving documents as well as the reflected light of the second white board *without* rereading the first standard white board so as to continue to correct the quantity of irradiation light with respect to the subsequent moving documents.

Accordingly, claims 1, 2 and 5 may be further distinguished over *Webb et al.* for at least such reasons. Withdrawal of the rejection is again respectfully requested.

II.   *REFERENCES CITED IN PTO-1449 FORMS*

Applicants note that the Examiner has not considered several of the references identified by the applicants in the PTO-1449 forms previously submitted. Applicants speculate this may be because the references are non-English. However, in at least all but one instance it appears that an English-language version of the foreign search report was provided. Accordingly, such references should have been considered by the Examiner. Consideration of these references in view of the English-language versions of the foreign search reports which accompanied the submission of the references is respectfully requested.

Regarding JP10-200711, attached is a concise explanation of the relevance and partial translation. The concise explanation is the same as that of the "Description of the Prior Art" found in the present application. Consideration of this reference in view of the attached is further respectfully requested.

III.   *CONCLUSION*

Accordingly, all claims 1-3, 5 and 6 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

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Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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Attachment   10—200711

(54) Title of Invention: IMAGE READER

(65) Publication No.: Japanese Patent Appln. Laid-open HEI 10 No.200711

(43) Publication Date: July 31, 1998

(21) Application No.: Japanese Patent Appln. HEI 9 No.5135

(22) Application Date: January 16, 1997

(73) Applicant: Ricoh Co., Ltd.

(72) Inventors: Yoshito Tsuboi.

[Concise explanation of the relevance]

A standard white board 11 is set between a moving document read section for reading an original document moved by an automatic document feeder 12 and a fixed document read section for reading a fixed document put on an original table 6, and the shading correction is performed in the document fixing mode and the document moving mode, using standard white board 11.

In the case of the document fixing mode, an optical system 8 returns to the home position (the position of a positioning sensor 10) of optical system 8 every time when the optical system reads one sheet of document.

In the case of the document moving mode, when optical system 8 initiates read in of the first document, optical system 8 moves from the home position (the position of positioning sensor 10) to the moving document readout position. After the reflected light of white board 11 has been read at the home position for the first document, and the shading correction has
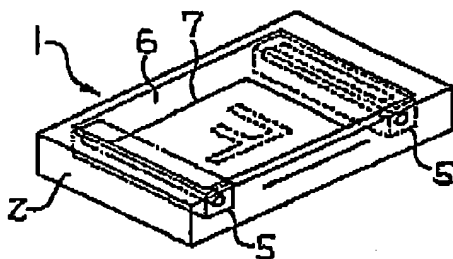
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. 2004年 7月 9日 18時42分   FUJIMOTO PATENT & LAW OFFICE   No. 9005   P. 4

10－200711

been performed, the correction is performed always at the same

correction value.

[Fig.1]
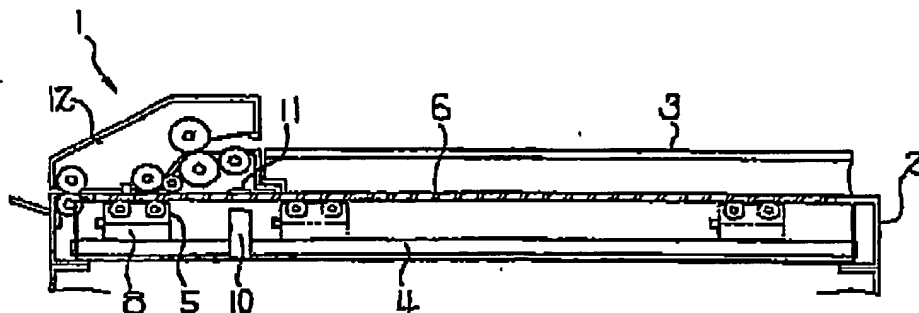
[Fig.2]   [Fig.3]

7: document

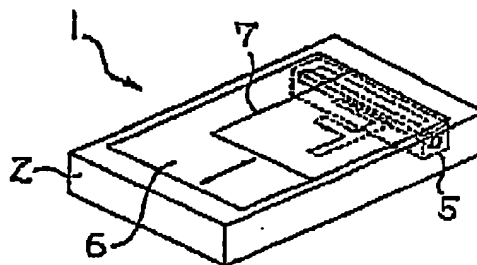
[Partial translation]

(57) [Abstract]

[PROBLEM] To obtain an image without a density difference even
when the document fixed on the original table is read and even
when the document moving on the original table is read.

[SOLUTION] The reader is comprised of optical system 8 and an
A/D converter. Optical system 8 has a CCD image sensor. In

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the document fixing mode, optical system 8 reads the document image, moving along with original table 6 in the sub-scanning direction. In the document moving mode using a sheet-through type automatic document feeder 12, optical system 8 reads the document image being carried on original table 6 at a constant position. The image read by optical system 8 is focused on the CCD image sensor. The A/D converter converts an analog output of the CCD image sensor into a digital signal.
A different reference voltage is set to the A/D converter when a white board 11 is read for shading correction, when the document is read in the document fixing mode and when the document is read in the document moving mode, respectively. Thus, the image without any density difference is obtained even when the document fixed on original table 6 is read and even when the document moving on original table 6 is read.

[0018] Here, in order to make the density of the reading image suitable, a shading correction is performed before reading of the document. That is, carriage 5 is moved just under white board 11 from a home position, the white data of white board 11 are read with CCD image sensor 9 of optical system 8, and the image of the document is read continuously.

[Fig. 1] Fig. 1 is a vertical section showing the internal structure of a scanner according to an embodiment of the present invention.
[Fig. 2] Fig. 2 is a schematic illustration showing a reading state in the document fixing mode.
[Fig. 3] Fig. 3 is a schematic illustration showing a reading state in the document moving mode.

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